

Crystal Clock Oscillator

- Gull wings optional
- Optional tristate
- TTL and CMOS compatible

Series **CTH11**



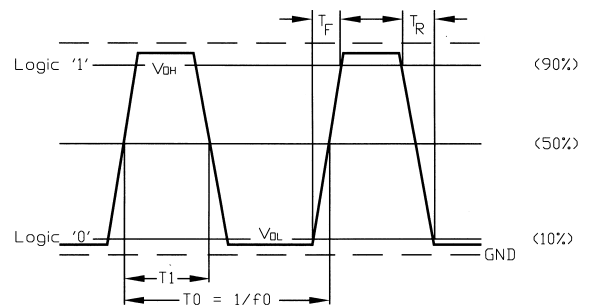
Part Numbering Example: **CTH11 00 4 L 45 - A2 - 50.0 TS L**

CTH11	00	4	L	45	A2	50.0	TS
SERIES	STABILITY	PACKAGE STYLE	VOLTAGE	SYMMETRY	OPERATING TEMP.	FREQUENCY	
CTH11	00 = ±100 ppm 50 = ± 50 ppm 25 = ± 25 ppm 10 = ± 10 ppm	1 = Full Size 3 = Full Size, Gull Wing 4 = Half Size 6 = Half Size, Gull Wing	Blank = 5V L = 3.3V	Blank = 40/60% 45 = 45/55%	Blank = 0°C ~ +70°C A2=-40°C ~ +85°C		Blank = No Connection TS = Tristate, pin 1

Specifications:

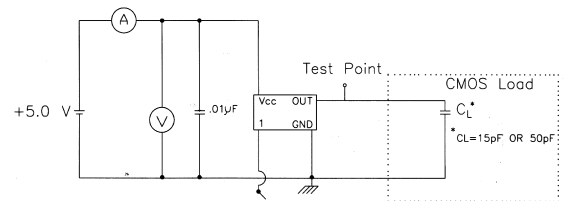
Frequency Range:	1.000 MHz to 70.000 MHz
Available Stability Options:	±100 ppm <i>Standard</i> ±50 ppm ±25 ppm ±10 ppm
Output Series:	TTL/CMOS
Input Voltage:	+5.0 VDC ±10% +3.3 VDC ±10%
Operating Temperature Range Options:	-10°C to +70°C
Output Voltage:	HCMOS $V_{OL} = 10\% V_{DD} V$ Max. HCMOS $V_{OH} = 90\% V_{DD} V$ Min.
Output Load:	10 LS TTL, 15 pF CMOS
Maximum Input Current:	20 mA (1.000 to 24.999 MHz) 35 mA (25.000 to 49.999 MHz) 50 mA (50.000 to 70.000 MHz)
Maximum Rise/Fall Time:	10 ns (1.000 to 23.999 MHz) 6 ns (24.000 to 70.000 MHz)
Duty Cycle:	40/60% <i>Standard</i> 45/55%
Max. Start-Up Time:	10 ms
Tristate Input:	@+5 VDC Input +0.80 VDC Max. to Disable +3.60 VDC Min. to Enable or Open to Enable @+3.3 VDC Input +0.80 VDC Max. to Disable +2.20 VDC Min. to Enable or open to Enable
Storage Temperature:	-55°C to +125°C

OUTPUT WAVE FORM



$$\text{SYMMETRY} = \left(\frac{T_1}{T_0} \right) \times 100\%$$

TEST CIRCUIT

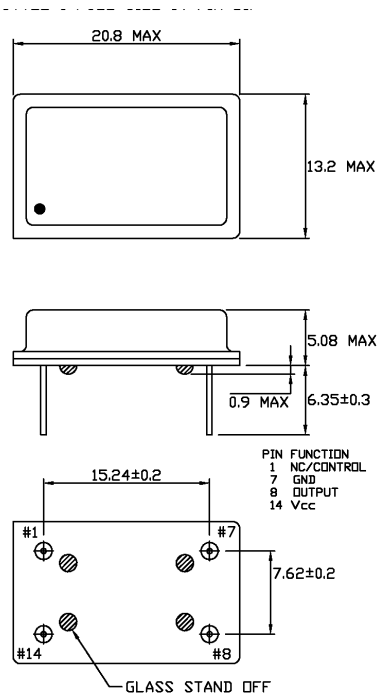


* Includes stray and probe capacitance (15pF TYP)

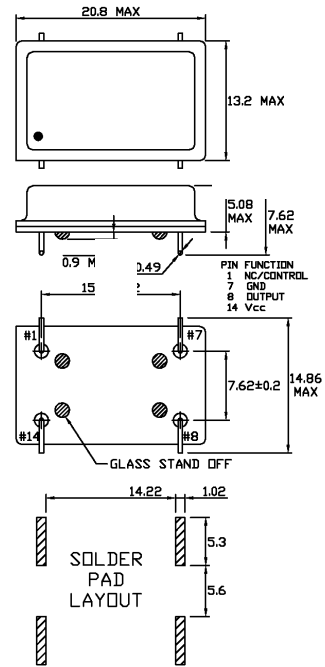


Dip Oscillator Package Dimensions

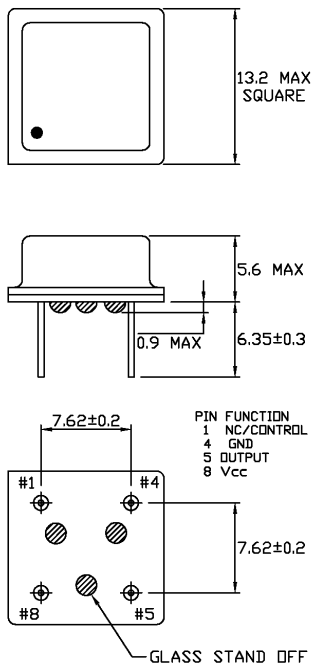
Style 1 Full Size 14 Pin Dip



Style 3 Full Size 14 Pin Dip Gull Wing



Style 4 Half Size 8 Pin Dip



Style 6 Half Size 8 Pin Dip Gull Wing

